The Hyde Group

Modelling Reporting Criteria:

The Value of a social tenancy: A socio-economic evaluation based on Hyde's housing portfolio

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Hyde

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Applicable Standards

The report has been prepared, and the work underpinning it has been undertaken in accordance with best practice standards for this type of research, and specifically in accordance with the GECES Standards for the measurement of impact as published by the European Commission.

Disclaimer

This project has been commissioned by, but does not necessarily reflect the views of, Hyde Housing Group. Bates Wells Braithwaite has coordinated its preparation, and has selectively challenged and checked the data gathered and applied in this report, and the calculations and logic derived but this should not be taken to imply that figures produced by The Hyde Group have been audited or, except where indicated, are the subject of formal or informal verification by Bates Wells Braithwaite. Consequently Bates Wells Braithwaite, its principals and staff accept no liability to any party relying on the figures so included.

Assurance

Hyde appointed PricewaterhouseCoopers LLP (PwC) to provide limited assurance, in accordance with International Standard on Assurance Engagements 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board, over the application of the Value of a Social Tenancy Modelling Reporting Criteria to calculate the economic value of a social tenancy (including the economic impact of construction and maintenance). The selected information assured and PwC's assurance opinion can be viewed at the following link: www.hyde-housing.co.uk/value-to-society. The figures assured are presented with Ⓐ as a footnote next to them in the Reporting Criteria.

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Introduction and Structure of this document

Introduction

The Hyde Group ("Hyde") is one of the UK's leading and award-winning providers of affordable housing in London, the south east of England and neighbouring areas. It is primarily a group of 'not-for-profit' organisations whose main business is the provision and management of good quality and secure accommodation, at prices people can afford to buy or rent on long tenancies.

Hyde was established in 1967, to provide homes for those left behind by the housing market and puts nearly 50,000 roofs over the heads of more than 105,000 people who might not otherwise have one, as well as providing them with easy-to-use landlord services.

Hyde generates surplus from its core rental business, active asset management and by building homes to sell on the open market. This allows it to deliver a key social purpose: to provide more homes for sub-market rent or shared ownership. Combined with its focus on customer services and engagement, Hyde seeks to continue to improve the life chances of residents and create tangible social value.

Hyde has always believed that its work improves people's life chances and that a social tenancy helps them thrive in a number of ways, extending beyond just a decent affordable home. That is why Hyde commissioned Bates Wells Braithwaite (BWB) to carry out research with the aim of better-understanding, and quantifying, the social impact it and others like it, have as organisations providing social tenancies, including identifying the extent to which it contributes to societal change. The research describes a range of areas in which value is brought to people's lives by affording them a social tenancy when previously they have lived in temporary accommodation with family and friends, or in less stable and supportive private tenancies. It then focuses on certain of these areas of benefit, and evaluates them to give a view of the value created being "…at least…" this much in a year. It adds to this the value generated in local communities by the action of constructing and maintaining the homes to give an overall minimum economic effect. BWB's work has been undertaken in accordance with best practice standards for such research, and specifically aligns with the GECES standards published by the European Commission.

During the year ended 31st March 2018, Hyde provided 35,915 social tenancies through its main portfolio, excluding those it manages on behalf of third parties.

Given the reliance Hyde seeks to place on this work, it appointed PricewaterhouseCoopers LLP (PwC) to provide limited assurance over the principles, methodologies and information used and gathered during the course of BWB's research, as outlined in this document which gives further details underpinning along with the final report, with that assurance work aligned with the ISAE 3000 (Revised) reporting standard.

Numbers that PwC have assured appear in the text with a footnote which includes the assurance symbol: Ⓐ.

The full report, *The Hyde Group – The value of social tenancy*, is available from the Hyde website www.hyde-housing.co.uk/value-to-society

Executive Summary: The value of a social tenancy

Structure of this document

This document has been produced to accompany BWB Advisory and Impact's report *The Hyde Group – The value of a social tenancy report* and provides a summary of the basis upon which the value modelling for the value of a social tenancy has been prepared.

The document is organised under the following section headings:

1. Research methodology
2. Impact analysis methodology
3. Modelling approach
4. Evidence base
5. Modelling inputs

Research methodology

Research methodology

This study was commissioned by the Hyde Group and undertaken between March and July 2018. Its purpose was both to determine the value of a social tenancy, with particular regard to Hyde tenants and to also consider the values generated from house building and home maintenance. The research methodology used for the study, and for informing the valuation model, is based on a combination of desk research (the **literature review), action research workshops, semi-structured interviews** and **targeted additional research** to evidence or validate our findings**.**

We used all of these methods concurrently, cross-checking the outputs of individual research activity with other findings to:

a) 'Triangulate' findings wherever possible;
b) Consider findings from more than one perspective wherever possible
c) Seek alternative views to test emerging hypotheses during the course of our research.

While there is a wealth of research available on social housing, social tenants and their lives, and alternative housing types, a holistic value of a social tenancy is under-researched. In the time available to us, we have focused our research – and in particular our literature review – on sources that deal specifically with the social impact generated through a social tenancy and on data sources that help us to evaluate that impact.

Impact analysis methodology

Impact analysis methodology

How Hyde delivers value

Hyde's mission statement is 'to provide more people with a roof over their head so they can make a home'. As a provider of social housing, Hyde creates impact through three main focus areas:

- Providing affordable homes (through building or regeneration)
- Providing modern landlord services
- Providing additional services as needed.

Each of these focus areas can be considered individually, but it is arguably their interdependence, in an operational model focused on improving tenants' lives and life chances that adds genuine value to overall outcomes.

Figure 1 (a larger version is available in Appendix A) shows how, for example, every aspect of Hyde's activity as a housing provider is connected to the design of its services as a landlord; or how additional services assure the longevity and stability of tenancies, and hence in some part, the value of the homes themselves (Hyde's primary asset base). Hyde is first and foremost a successful business but one with the welfare of its residents firmly at its heart. Tenancy success is a goal shared by Hyde as a landlord and its tenants, and the benefits work both ways.

Figure ,1 How social value is created

We discuss Hyde's activities in more detail below, through the lens of outcomes and noting the impact that each area of service has in the lives of Hyde tenants. This discussion is sometimes referred to as a 'Theory of change', which simply means a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. It

Impact analysis methodology

explains the links between what an organisation, programme or change initiative does (its activities) and how these lead to desired goals (outcomes).

The Carnegie UK Trust defines wellbeing as an outcome from which: *"everyone can realise their potential, enjoy their environment, work meaningfully and contribute to their community."*

Improved wellbeing is based on five inter-related wellbeing pillars: financial; mental; physical; relational and purpose.

The strength of the pillars helps to determine whether an individual or family struggles or thrives in their home and in their life. If one area of wellbeing is lacking, this can often have a knock-on or toppling effect on one or more of the others - resulting in poor social outcomes. In geographic areas where there is concentrated social need, improving outcomes for individuals can also lead to improved community outcomes. In other words, decent, affordable and supportive housing leads to improved resilience of whole communities.

Outcomes in each of the five pillars of wellbeing

This next section gives a definition of each of the five wellbeing pillars and describes the outcomes that Hyde's housing supports within each of them, setting out the features in Hyde's work that are responsible for those. It should be noted that each of the activities and outcomes described are not exclusive to housing associations, nor indeed to Hyde itself. It is the combination and extent of the activities undertaken which determine the levels of impact achieved. Even among housing associations with similar purpose and goals, the configuration of services and activities will vary, leading to different outcomes.

Figure 2 (a larger version is available in Appendix A) illustrates the outcomes associated with each wellbeing pillar and shows the effect on the lives of tenants and those around them, starting with the individual and flowing out into the wider community and society.

Figure 2 The outcomes of a social tenancy

Impact analysis methodology

Pillar one: Financial wellbeing

Definition: Financial wellbeing is the degree to which people can afford their daily needs, in terms of housing, food, clothing, utilities, unforeseen costs and a sufficient amount to afford to live a meaningful life.

Our research showed that residents in social housing are likely to have less problem debt due to affordability of rent, avoidance of their unfair agency fees and charges, a less punitive approach to arrears and access to services, such as benefits checks and debt counselling. We note that, while social housing provides a safety net, research shows that financial wellbeing is still problematic for many social tenants.

Stability in housing is associated with the ability to find, retain and travel to work. Temporary accommodation is a particularly difficult situation in which to hold work and family together. Childcare, financial constraints, wellbeing and the insecurity of temporary accommodation have all been cited in studies as employment constraints.

Pillar two: Mental wellbeing

Definition: Mental wellbeing is the degree to which an individual is able to realise his or her own potential, to cope with the normal stresses of life, work productively and fruitfully, and be able to make a contribution to their community.

Stable and safe housing in good condition has a significant effect on improving the mental wellbeing of residents, by reducing stress, overcrowding, sub-standard conditions, and improved affordability – all of which can significantly test a person's resilience when not addressed. Additional services provided to help ensure successful tenancies (tenancy success services), as well as relationships with health and social care teams and third sector organisations, mean Hyde is integrated into a network of mental wellbeing support available to residents.

The impact of a stable and safe home can be seen on many levels. A Nottingham City Homes study[1] revealed that GPs experience increased demand for their services as a result of the impact of poor quality housing. The Police Service reported a similar picture, in terms of 'frequent callers', who repeatedly require costly call-outs by officers, but whose underlying need is for mental health support and not policing.

Pillar three: Physical wellbeing

Definition: Physical wellbeing is not just the absence of illness. It is about being safe, sheltered and in good health and it is closely connected to mental wellbeing.

Physical wellbeing of residents improves (or at least does not degrade) as a result of factors such as: housing stability; warm, dry, safe and energy-efficient homes; access to maintenance services; good quality indoor and outdoor space; sufficient space and fuel to prepare food; improved finances (which in turn enable access to better food and sufficient heating); local partnerships with health and wellbeing teams, as well as specific Hyde Foundation initiatives.

Such is the importance of housing to health that statutory bodies and others concerned with health, housing and social care are working much more closely together within the 2014 Memorandum of Understanding developed between the NHS and 22 key partners – including the National Housing Federation (NHF).[2]

[1] Jones, Valero-Silva and Lucas, 2016
[2] Buck and Gregory, 2018

Impact analysis methodology

Pillar four: Relational wellbeing

Definition: Relational wellbeing is the degree to which people are able to form positive and beneficial relationships with partners, children, family and neighbours, within the community and at work. A stable and uncrowded home environment, in which residents are able to experience improved mental and physical wellbeing, reduces the stress and strain upon existing family and personal relationships and can provide a starting point for the formation of new ones.

Our research with Hyde staff, local authorities and the Police placed emphasis on the link between good and stable housing and the quality of relationships between parents and children. Hyde and other social housing providers are often 'at the table' in discussions with public agencies, such as social care plans, Multi-Agency Risk Assessment Conferences (MARACs), community safety forums and local planning. As such, Hyde plays a role in preventing re-offending, early identification of families in need of support, drug-related deaths, crime and abuse. All of these are high impact and high cost...and depend on the formation of links, networks and relationships with – and on behalf of – residents.

It is clear, from our interviews, that many individual private landlords have neither the desire nor the networks to engage in partnership work designed to enable early identification and effective management of costly problems. Hostels are described as often having absent or inadequate visiting and management regimes, leaving people vulnerable.

As well as proactively managing challenges in the community. The Hyde Group also invests in community development, which helps to build social capital. Projects range from volunteering schemes, mentoring programmes and investment in community resources, to inviting other organisations to stimulate initiatives, for example the recent £50,000 Entrepreneurs' Fund.

Pillar five: Purpose

Definition: The charity SenseAbility defines a sense of purpose as "the motivation that drives you toward a satisfying future." and "helps you to get the most from the things you do and achieve".

Purpose arises from having the right conditions, support and sufficient agency to imagine and be able to work towards goals, in both the near and far future. Affordable, settled and secure housing in good condition, supportive relationships and specific tenancy support, all provide opportunities for residents to develop their sense of purpose. Research shows that having a sense of purpose is linked to longer life as well as better employment, attainment at school and increased activity in volunteering or caring for others. These contribute to wider community wellbeing and can lead to a reduction in demand for formal support services.

Developing a sense of purpose starts early in life and is linked to educational and development opportunities. Insecure housing in poor condition can be all-consuming and its effects upon mental and physical wellbeing, in particular, mean children are more likely to miss school and be classified as Not in Education, Employment or Training (NEET) later in life. Adults dealing with the stresses associated with unstable or poor housing find it more difficult to hold down a job, while simultaneously dealing with multiple challenges at home.

Impact analysis methodology

Our social housing and counterfactual hypotheses

This section describes the methodology we have used to calculate (or 'model') the value of a social tenancy and explains the logic that sits behind that methodology.

To understand the impact of a social tenancy we need to model what the life course of social housing tenants might be if that social housing did not exist. This alternative scenario is referred to as a 'counterfactual' argument to the current state. Comparing aspects of the counterfactual to what we know happens in the current state (in which social housing does exist) allows us to determine the value of social housing.

The aspects we have modelled in both scenarios – with and without social housing – relate to the costs of service provision (by housing associations and service professionals, such as GPs and social workers), economic activity related to employment status and costs such as welfare benefits. Details of the specific cost elements modelled can be found in Section 6.

For the purposes of our methodology, we have focused upon the three main housing alternatives that residents would find themselves faced with: low-cost private rental, temporary accommodation and living with friends and family. Continuous Recording of Lettings and Sales in Social Housing in England (CORE) data[3] shows that these are the main routes into social housing.

Understanding the range of outcomes for those living in social housing is an important part of the research, as it reduces the likelihood of over-estimating the social costs associated with alternative forms of housing provision. This is described below, in the section *Life in social housing: a typology of situations.* Modelling in this way acknowledges the challenges and poor social outcomes that some social housing residents still face, as well as the distance that the social housing sector may still need to travel in terms of its provision. This is particularly important, as whilst much of Hyde's provision is 'general needs', the profile of residents in social housing overall has changed over time (due to ever-tightening qualification criteria) in the face of increasing demand for scarce resource.

Some outcomes are beyond the control of housing, its providers and its residents. The rise in low-paid and insecure work, and ever-increasing living costs, means that those with no other needs, besides that for an affordable home, are finding themselves further away from stability. It is a startling fact that the majority of households in poverty in the UK have at least one working member. Many of those on low incomes and insecure work are concentrated in social housing and, while social housing has a huge positive impact on people's lives, we should also remember that it is not a panacea to all ills. Improving outcomes for tenants requires attention to a range of social, economic and political factors.

[3] COntinuous REcording of Lettings and Sales in Social Housing in England: CORE, 2018, https://core.communities.gov.uk/

Impact analysis methodology

Life in social housing: a typology of situations

Our research leads us to a broad understanding of what life is like for social tenants. We have drawn a broad typology from this, which describes the lives of social housing tenants in one of four typical situations. Note that tenants are unlikely to stay in any one situation throughout their tenancy, nor is there a linear progression from one to another. Instead, we are likely to see people transitioning backwards and forwards from one situation to another in the wake of life events and as their life course progresses. A summary of the four situations is set out below:

1. **Stable and good life:** This situation is comparable in many respects to national averages. However, social tenants in this situation will have lower than average overall income levels and there will be higher than average receipt of Housing Benefit and Income Support (or Universal Credit).
2. **Stable but poor quality life:** Tenants in this situation are financially worse off than average. They are just as likely to be employed as unemployed or in unstable employment. Whatever their employment status, they have low levels of income, and/or insecure work with poor predictability of hours, perhaps working more than one job in the 'gig' economy.
3. **Struggling:** This situation is characterised by a virtual absence of stability. Tenants in this situation are less able to manage their lives well than others. They may be unemployed or frequently in and out of zero hour contracts and temporary work. Because they are never in a job for long, and frequently have to cycle back onto benefit payments (with the system's inbuilt delays), they build up rent arrears and more likely to have personal debt, which is difficult to manage.
4. **Crisis:** In this situation one or more of the elements crucial to wellbeing are at crisis point and impacting significantly on life for residents in this situation. Poor mental health is experienced to the degree that it impacts upon their ability to manage day-to-day. Issues, such as hoarding behaviour, may have spun out of control and be causing genuine concerns with regard to health and safety. Physical health conditions are likely to be poorly managed – including dementia, disability, reduced mobility or long term conditions.

These are 'typical' situations, drawn from blended descriptions of the lives and circumstances we have learnt about in our research. By no means does every person aligned to the 'Crisis' situation experience every one of the challenges listed and the same is true of the other situations. They are intended to paint a picture and to provide a starting point from which to calculate the cost of addressing some of the challenges associated with each situation.

We worked with Hyde staff, using Hyde's current database segmentation analysis on its tenants from 2015, to make assumptions about which of the four situations their residents might best align to, using indicators such as payment history, number of calls to Hyde, demographic profiling, family make up, physical needs and receipt of benefits. While not perfect, it does allow us to make some broad assumptions that can then be refined over time, as Hyde reports on its impact year-on-year.

Impact analysis methodology

Lives without social housing: exploring the alternatives

Our counterfactual argument takes our cohort of Hyde's tenants and redistributes them across the three main alternative housing situations chosen, using proportions taken from CORE data. These proportions were then adjusted following the research.

Three alternative scenarios are set out below. It is important to note that, within each of these scenarios, residents will experience the full range of outcomes from thriving, to doing very poorly. We are not suggesting that all alternative scenarios are poor. However the key fact to grasp is that these alternative scenarios are inherently unstable – people find it harder to maintain a stable life in most of them and there can be quite rapid movement from one to another (usually in a 'downward' trajectory) until stable, more permanent accommodation is found. Over time, we may even see a trend towards the bottom, if the challenge of supply and demand in affordable housing is not met.

1. **Temporary accommodation:** The world of temporary accommodation is extremely mixed but, sadly, much of it is of a low standard, with overcrowding and unhealthy surroundings being commonplace.
2. **Private rental sector:** Our basis for modelling outcomes and costs associated with living in this scenario considers the lower end private rental accommodation market, where rents are just about affordable for today's social housing tenants, albeit some will struggle.
3. **Living with family or friends:** This scenario can apply to almost anyone. For some, it can be the result of a financial shock of some kind (e.g. losing a job, relationships failing, incapacity after hospitalisation). Others may not (yet) have the financial or emotional resource to secure a home of their own. A few will be fleeing domestic abuse, or travelling further afield to find work.

The social outcomes associated with living with family or friends is particularly under-researched. Our primary interviews sought to gain views and experience from local authorities, police, Hyde staff and from tenants themselves. Our findings are based on these interviews and secondary research data – which are both few in number. This area of research would benefit from a specifically commissioned study to understand how this arrangement works for people and the effects it has on life course and outcomes.

Modelling approach

Modelling approach

Overarching methodology

To calculate the social value of a social tenancy, four profiles which determine how life would look like 'with social housing' (*stable and good life, stable but poor quality life, struggle and crisis*) were compared to a counterfactual: life 'without social housing'. Figure 3 illustrates the difference that social housing can make to a whole tenancy base – enabling more people to move towards a stable and good life than is the case in the alternative housing scenarios we have research.

Figure 3 The difference that a social tenancy makes to people's lives

The value of a social tenancy was therefore calculated as the difference in cost between these two scenarios.

The detailed evaluation model was built on a logical argument. It started with the current observed and researched scenario, in which social housing is benefitting a known population of tenants. These tenants are broadly experiencing life in line with one of the four situations described in the profile typology. We used Hyde's own customer segmentation data to decide what proportion of tenants might be in which situation. Modelling proceeded through Steps A to G:

Modelling approach

Step A: Each situation described encompasses a number of challenges, which are experienced to varying degrees by different cohorts in that situation. We used trusted databases and research evidence to determine what proportion of tenants in each situation are experiencing which challenges, to what degree.

Step B: From there, we took known or derived costs associated with these challenges and modelled them for the blended cohort groups in each of the four situations in our typology to arrive at an overall cost for social tenancies. Costs are of different types and include:

- Pure costs of provision by the housing association or other service providers
- Costs associated with compromised health and wellbeing – a combination of treatment or care costs and reduced earning capacity
- Costs associated with anti-social behaviour, poor community wellbeing, etc (e.g. policing).

Step C: The same exercise was repeated for our 'counterfactual' scenario, in which social housing or its equivalent did not exist. We assumed that those currently benefitting from social housing (or an equivalent provision) would be distributed across three main alternatives: the lower end of the private rented sector; emergency or temporary accommodation; or living with family and friends (including 'sofa surfers').

The latter two alternatives capture those who are effectively homeless but we did not include street homelessness in our modelling because without wider support, social housing does not provide an immediate solution to this (except in those areas currently piloting the Housing First initiative). Households were distributed across these three alternatives, using CORE data, which describes Hyde's tenants' pathways into social housing and pro-rating in each of the alternative housing types.

Step D: An assessment of the cost of challenges associated with each alternative housing type was completed in step B, providing a comparison value to that derived from the four situations in our social housing scenario. It should be noted that, while challenges may be similar in type when comparing our known scenario (life in social housing) to our counterfactual (life without social housing), the distribution, frequency, extent and patterns of those challenges will be experienced differently. We have allowed for this in our modelling, basing assumptions on research evidence wherever possible.

Step E: The total costs associated with the social housing scenario were deducted from the total costs associated with the counterfactual scenario to give an overall value of social housing provision.

Step F: We modelled the values of social housing using input data at a 'per person' level. We then adjusted the value by the average size of a Hyde household to arrive at a value for a social tenancy.

Step G: The value calculated is annual, rather than multi-year, so no discounting process applies.

More detail on the costs used in our modelling can be found in Section 6. *(Note that discounting has been applied in deriving the annual cost of an individual being NEET).*

Modelling approach

Populating the profiles – With social housing

We used Hyde's own customer segmentation data (dated October 2015) to populate the profiles used in this impact valuation project. The source data was prepared by Hyde *'to better understand Hyde's customer need, demand and behaviours in order to design services which maximise the customer experience, while minimising cost per transaction'* and was based on five underlying criteria: need; demand; personal agency; digital engagement and tenancy success. Customers were considered against these criteria and classified as High, Medium or Low (for Digital Engagement this translates to Sophisticated, User and Excluded) to create 12 distinct and identifiable segments.

An overview of the characteristics of each of Hyde's customer segments is shown in Figure 4.

Segment	Needs	Demand	Personal agency	Tenancy success	Digital engagement
1	High	High	Low	Low	User
2	High	High	Low	High	Excluded
3	High	High	Medium	Medium	User
4	Medium	High	Medium	Low	User
5	Medium	Medium	Low	Medium	Sophisticated
6	High	High	Medium	High	Excluded
7	High	Low	Low	Medium	User
8	High	Low	Low	High	Excluded
9	Medium	Medium	Medium	High	User
10	Low	Low	Medium	Medium	Sophisticated
11	Low	Low	High	Medium	Sophisticated
12	Low	Low	High	High	Sophisticated

Figure 4 An overview of the characteristics of each of Hyde's customer segments

While not an exact equivalent to the characteristics of profiles used for this project, there was sufficient overlap and alignment of purpose between the two projects for us to be confident in using and adapting this segmentation in our own analysis. To do this, we worked with Hyde to map proportions of each of the 12 segments onto each of our social housing situational profiles: Stable and good life; Stable and poor quality life, Struggling and Crisis.

Modelling approach

Figure 5 (a larger version is available in Appendix A) shows how the 12 segments are distributed across the four profiles as shown in Figure 3.

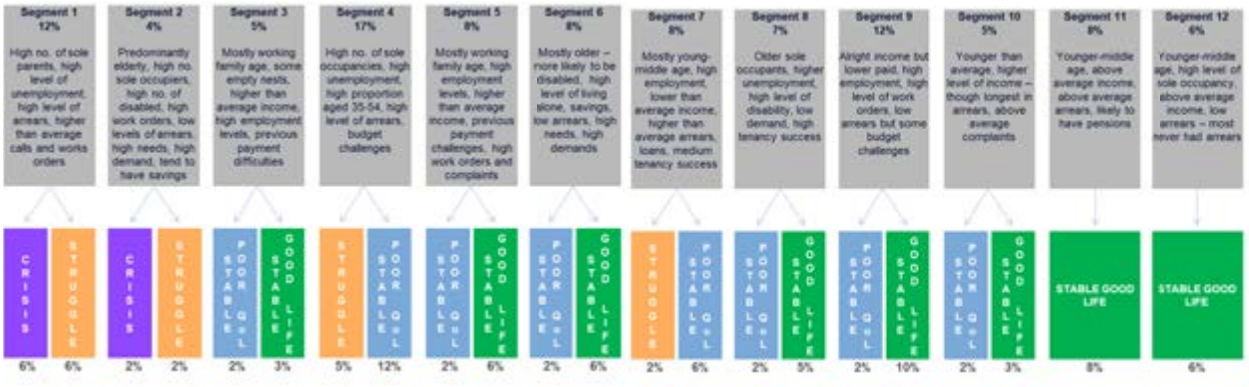


Figure 5 Distribution of the 12 segments of Hyde tenants across the four profiles

We further broke down the profiles to show proportions of elderly, adults and children in each, enabling us to model individual costs only for the groups to which they apply. A summary of how adults, children and the elderly are distributed across the profiles is shown in Figure 6. Percentage figures at the top of each box denote the overall percentage of Hyde residents falling into each profile.

Figure 6 Distribution of adults, children and the elderly across the four profiles

Data analysis was necessary to arrive at this age-related segmentation:

1. Segmentation analysis showed partial data for average resident numbers, proportions of elderly residents, proportion of households with children and specific adult age bands which predominate.
2. For each segment the data points shown were different, with no one segment providing data for all of the data points.
3. We have mapped known quantities and percentages and derived the missing data points for each (see worked examples below).
4. Throughout our modelling, we have used Hyde segmentation data which showed characteristics of properties in each segment but multiplied each household by a factor of 1.3, as the average number of adult and elderly residents per household. This figure was arrived at by dividing the total number of properties analysed by the published resident count of 105,000, to calculate an average number of residents per household.

Modelling approach

Other data points from the segmentation analysis have been used as necessary in our modelling, however these two main derivations (distribution of Hyde segments across BWB profiles and proportions of elderly, adults and children in each profile) underpin our model so have been described in detail above.

Worked examples

General assumptions used

In discussion with Hyde, we agreed three key assumptions that are used throughout our derivations:

1. In households where there are children, we have assumed an average of two children per household
2. In households where there are children, we have assumed that 70% of these are sole parent families and 30% dual parents. For the latter group, unit costs per adult are therefore doubled for modelling purposes
3. In elderly households we have assumed that 70% of residents live alone and 30% with their partner.

Example 1: Age distribution based on numbers of households with children

Age-related data provided: % aged 35-54 (or other specified age band); % households with children.

Derivation used:

a) Knowing the proportion of households with children, assuming two children for each of these, we could calculate the **number of children**

b) Applying our assumption of 70% sole parents in these households we calculated the total **number of parents** in the cohort (Number of households with children x 1.3)

c) Comparing that number to the 66% of the cohort aged 35-54 (data point provided), we calculated the **number of adults without children**

d) Knowing the proportion of the segment in a specified working-age adult age range, and using this to represent the **total working-age adult** population in the segment

e) Assuming that the **number of elderly people** in the segment was the total segment less the number of children and the number of working-age adults.

Segments in which this derivation method is used: 1, 3, 4, 5, 7, 9, 10, 11, 12.

Example 2: Number of adults and children when proportion of elderly, and proportion of children known

Age-related data provided: % aged over 65; % households with children

Derivation used:

a) Knowing the proportion of households with children, and assuming two children for each of these, we calculated the **number of children**

Modelling approach

b) Knowing the proportion of elderly households, and assuming 70% of these are single people and the remainder couples, we calculated the **number of elderly**

c) The **number of adults** was calculated by subtracting the number of children *and* the number of elderly from the total population of the segment.

Segments in which this derivation method is used: 2.

Example 3: Number of adults when proportion of elderly, and proportion of children known

Age-related data provided: % aged over 65

a) Knowing the proportion of elderly people, and the total size of the segment, allowed us to calculate the number of **elderly people**

b) We assumed the remaining people were all **adults**. This was because:

   a. Adults are lower cost in the model than children, therefore it is prudent to assume people are adults

   b. Other data provided, such as relatively low occupancy rates, was indicative of there being few children in this segment.

Segments in which this derivation method is used: 6, 8.

Application of these derivation methods:

Figure 7 shows how each of these example derivation methods was used in our modelling.

Segment	% households with children	% people falling within a working-age adult age range	% elderly	Derivation method used
1	✓	✓	×	Method 1
2	✓	×	✓	Method 3
3	✓	✓	×	Method 1
4	✓	✓	×	Method 1
5	✓	✓	×	Method 1
6	×	×	✓	Method 2
7	✓	✓	×	Method 1
8	×	×	✓	Method 2
9	✓	✓	×	Method 1
10	✓	✓	×	Method 1
11	✓	✓	×	Method 1
12	✓	✓	×	Method 1

Figure 7 How derivation methods were used in the modelling

Modelling approach

Limitations with the method:

1. The Hyde segmentation source data could have been interpreted in multiple ways. For example, it was unclear whether some data was for households or individuals. However, with only 1.3 adults and elderly per household, the differences were seen as not material.
2. Some of the segmentation data has not been taken into account. For example, we generally did not use data, such as employment rates, use of technology, or average household size, to inform our estimation of the proportions of people falling into each age bracket. This was because, while such information was indicative of age profiles, it could be interpreted in multiple ways.
3. The adult working-age ranges provided for several of the profiles generally did not cover *all* working-age adults (for example, for some segments we were told the proportion of people aged 35-64). In the segments where this applied, we assumed that the range given covered the entire working age population and that all other adults were elderly**.** This means we will have slightly overestimated the number of elderly people. Since, in each case, the majority of people in each segment fell into the age-range provided, the scale of this overestimation is small.

Populating the profiles – Without social housing

As discussed earlier, Continuous Recording of Lettings and Sales in Social Housing in England ('CORE') data was used to analyse life in the absence of social housing.

This national information source records information on the characteristics of both housing association and local authority new social housing tenants and the homes they rent and buy. Certain categories of housing (owning/buying; renting with job; and other) were removed from the CORE data (and the three profiles family and friends, private tenant and temporary housing were pro-rated up accordingly) to arrive at the distribution shown in Figure 8.

Previous tenancy	HA households	% pro-rated
Family/friends	27%	47%
Renting HA	25%	0%
Private tenant	20%	35%
Renting local authority	11%	0%
Any temporary accommodation	10%	18%
Other	4%	0%
Owning/buying	2%	0%
Renting with job	1%	0%
Total	**100%**	**100%**

Figure 8 Distribution of profiles without social housing

Modelling approach

Figures representing the proportions of elderly, adults and children in each of the 'without social housing' profiles were arrived at through calculating the weighted average % of elderly, adults and children in 'with social housing' profiles and then applying this average to all 'without social housing profiles'. The proportions of elderly, adults and children in each profile have been kept at the same levels as the known mix in the Hyde tenancies (from the segmentation analysis). This is because, in measuring the value of a social tenancy, we are comparing life for Hyde residents with what it would have been like for these people before they come into social housing. The split between elderly, adults and children is kept the same across each of the three 'without social housing' profiles (i.e. the average level for 'with social housing' profiles):

Period of time covered by the models

Although social housing is an intervention which affects someone's life course, the present value of this lifetime saving was not modelled as the length of social housing tenancies is variable. Residents can remain tenants for as long as they need this type of tenancy.

Instead, given that a social tenancy is an annually recurring 'intervention', an annual value was calculated. Care should therefore be taken when using these models to estimate the cost of a social tenancy over several years, as our models do not take account of future inflation or other changes in unit costs over time, for example if a housing association changes its operating model.

Evidence base

Evidence base

Our evidence base comprises both quantitative and qualitative research findings. We consider the evidence base as a whole in forming overall conclusions and apply individual findings or data points to our modelling to derive value figures.

Qualitative evidence is as valuable as quantitative. However, it can be more open to subjectivity or misinterpretation. For this reason, wherever possible, we look for published research to validate findings of research interviews and other anecdotal or experience-based qualitative data.

Published, peer-reviewed academic research is used wherever we have found data that specifically backs our findings. Published research that is less stringently reviewed, including commentary or opinion-based research, is used with caution and we take pains to gather alternative views to avoid subjectivity.

In cases where the evidence provides a narrower or broader analysis than ours, or considers the same issues in a slightly different context, we use professional judgement to adjust the data accordingly, using reasonable assumptions about how the data is likely to behave in our context and appropriate supplementary evidence.

In some cases, specific data has not been found in the research, yet there is nevertheless strong qualitative evidence to suggest an effect or an outcome. In such cases, we have made a reasonable assumption about what that effect or value should be. We have tested these assumptions with Hyde staff and, in some cases, with other experts.

Throughout, we have endeavoured to find and use the most recent reliable evidence available. In instances where we draw on evidence that is more than five years old, we have considered whether more recent sources are available and whether they have been published with sufficient detail to enable them to be used for the purpose of this study. Where more recent sources are not available, we have considered whether the earlier ones are:

- Likely to have been compromised by material changes since publication, for example with regard to policy environment
- Used in areas of the research to produce numbers which are material to the overall minimum value of a tenancy produced by the research.

We have not found areas where both are the case, and have highlighted in our detailed Technical Annex any areas where just one of the two arises.

In instances where our confidence in the assumptions used for modelling is lower than preferred, we have ‘sensitivity tested’ the assumption by re-modelling with higher or lower input figures. This shows where specific assumptions might have a material impact on the overall value calculation, if they turned out to be significantly wrong.

In considering whether a matter is material, we have had regard to the effect that its inclusion, exclusion or variation would have on the view taken by a reader of this report. This is taken in the context of the principal question being answered: “What is the value of a social tenancy?” i.e. the total figure produced by the calculations and not so much the detailed breakdown of that total between individual stakeholders. However, it is also the case that the most material assumptions contribute to the figures for the most material effects on stakeholders (i.e. the effects on the local economies and employers from job creation; construction and maintenance activity; local authority savings, temporary accommodation and savings in Universal Credit payments.

Evidence base

The principles used here follow those laid out in Chapter 8 of the GECES standards.[4]

RAG rating categories

Figure 9 shows how we rate our assumptions Red, Amber or Green (RAG ratings), according to the level of confidence we place in the research evidence behind each.

Red	Reasonable assumption with limited supporting evidence	May be: • Qualitative or quantitative, financial or otherwise • Opinion or judgment evidence where it is internal or subject to significant assumptions
Amber	Relevant evidence with some shortcomings or need for further research	May be: • Gained from a variety of research methods applied appropriately • Qualitative or quantitative, financial or otherwise • Evidence of a high standard but for a different cohort with an assumption as to whether it is relevant to this one • Evidence with some underlying assumptions in its application which are both reasonable and material • Internally or externally generated
Green	Strong, independent evidence relating to the relevant cohort and situation	Would be evidence from or about the relevant cohort May be: • Gained from a variety of research methods applied appropriately • Qualitative or quantitative, financial or otherwise • Either directly related to this cohort or with evidence that it is intended to relate to it (e.g. Universal Credit rates) • Independent in the sense it comes from a source external to the client, or is developed using an appropriate direct research method

Figure 9 Rating our assumptions according to the level of confidence

[4] Clifford, Hehenberger and Fantini, 2014

Modelling inputs

Modelling inputs

Cost types

To calculate the value of a social tenancy, we used a cost-based and economic approach, which looks primarily at the costs incurred or avoided by stakeholders or the income and gains enhanced in their favour in each of the different housing circumstances, and focused on certain (but not all) economic effects. In this way, we also looked at productivity gains through employment, or more effective employment, as well as a lower amount of Universal Credit paid out by DWP to people who gain employment.

Costs in the model are therefore a blend of:

- Costs avoided
- Costs reduced or economic value created
- Improved efficiency seen in a more efficient use of resource, leading to greater income or value added.

Note that we have always modelled cost incurred to stakeholders for each profile where the cost that is saved by a stakeholder (or an increase in value for a stakeholder is seen) has been modelled, this is highlighted in the text. Seven areas of wellbeing and their associated costs were examined when answering the question: "*But for social housing, what would life look like?"*

1. Financial wellbeing
2. Physical health
3. Mental health
4. Education
5. Social justice
6. Family
7. Work.

Different cost lines were considered for each wellbeing area (above) and assumptions were made as to the prevalence of this cost for each profile. In this way, a cost for each profile was calculated. The aggregate value of all profiles in 'life with social housing' and 'life without social housing' was then calculated.

Modelling inputs

The value of a social tenancy was therefore calculated as the difference in cost between these two scenarios.

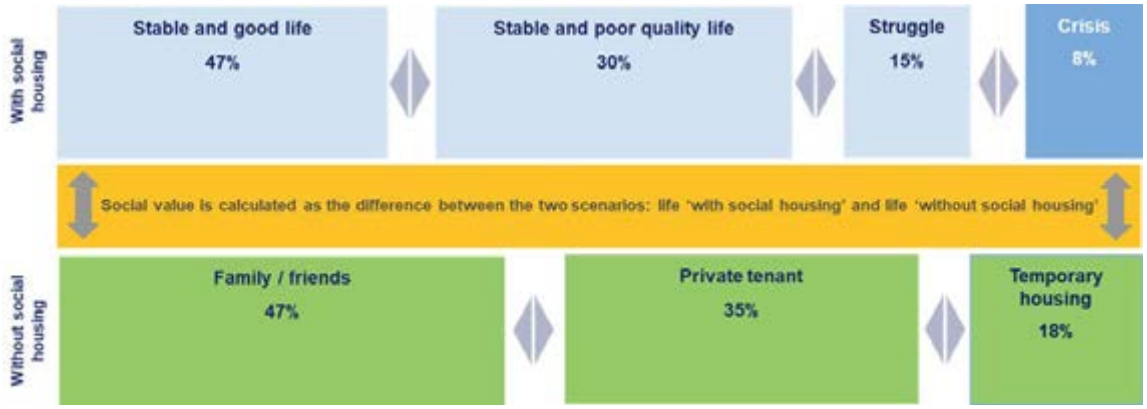


Figure 10 Modelling approach

Our evaluation does not take into account those outcomes that we did not model, such as:

- Children's services
- The impact on parenting for the next generation
- The impact on future poverty as a result of pension shortfalls and a lack of assets
- Costs of street homelessness which is felt to be a likely outcome for some
- The value of cohesive communities.

For the above outcomes, we either could not find sufficiently robust evidence to model the effects attributable to social housing or the outcome was too complex to be properly modelled in the scope of this work. Even without full inclusion of all of the outcome values it can be seen the contribution that Hyde's social housing brings to other stakeholders each year is significant.

Modelling inputs

Construction and maintenance

The creation and sustaining of social tenancies requires the organisation responsible to spend, on wages of those involved, and on direct suppliers, to enable the buildings to be constructed and fitted out, and then maintained. There are two levels of value created:

- The investment in construction and maintenance, for which the housing provider receives value, in terms of owning the property and the income derived from it
- The economic activity generated by individuals, and others in the supply chain, spending their earnings in the local area.

This area of evaluation assumes that the expenditure is offset by the value generated for the social landlord and focuses therefore on the second heading.

House building can generate substantial local economic activity. It creates short term employment within construction, as well as construction-related jobs, such as legal services and housing management (direct effect). This has a 'knock-on' effect, in terms of an increase in demand for raw materials from suppliers (indirect effect). It also creates longer term employment, in the form of service jobs such as education and health, to supply the new residents in that area. In addition to this, it generates additional income for existing businesses and local government, as construction workers working in the area spend their wages on local goods and services (induced effect).

Local Economic Multipliers ("LEMs") allow us to calculate the total value of benefit to the economy. The inputs for the calculation under this method are:

(1) Total construction cost

(2) Total maintenance cost

(3) Output multiplier – figure published by government, which varies slightly according to industry.

Output multipliers measure the ratio of direct and indirect output changes to direct output change due to a unit increase in final demand. There are two types of multiplier; the one used in the calculation for this report above (type II) includes the induced effect, as well direct and indirect effects of house building. We used an output multiplier of 1.88[5], taken from a report to the Scottish Government on 'Communities Analytical Services'. A similar multiplier for London and the South East was not available.

[5] Monk, Tang and Whitehead, 2010

Modelling inputs

Hyde's annual expenditure on maintenance for the year to 31 March 2018 was £47m[6], and expenditure on construction amounted to £187m[7], see breakdown below:

		£'000	
Note 4	Routine maintenance	21,660	Construction and maintenance costs have been derived from The Hyde Group's financial statements for 2017/18.
	Planned maintenance	15,312	
	Net major repairs expenditure	2,928	**These figures have been taken from Note 4 - Group Particulars of comprehensive income from social housing lettings. We have included £6,816k from the stated service charge total of £20,650k to include service chargeable maintenance costs.**
	Service Charges	6,816	
	Total	**46,716**	
Note 17	Housing Property additions	**187,159**	This figure includes major works to existing properties and construction.
	Construction and Maintenance Spend Total	**233,875**	

This was applied against the LEM uplift of 0.88 (1.88 – base value of 1) to give us a value of £41m, which, spread across the total number of existing homes gives a value of £1,145. The same approach was taken for construction costs (£187m for the year to March 2018[8]) which resulted in a value of £4,586 to give an overall benefit of £5,730[9] per home.

The value of uplift received from construction can also be spread across the number of new starter homes in the year (1,002[10]). Before this is done, the major repairs amount of £23[11]m would need to be removed so that the value of benefit solely reflects the construction work of new homes being built. This gives a total value of £143,948 per home, and might reasonably be expected to be realised across a 20 year period before a major refurbishment or replacement is required.

In coming to an annual value of a social tenancy, we have preferred to spread the LEM effect across the total tenancies in the portfolio. If, as an alternative, we look at spreading the LEM effect just across new builds, the temptation for the reader is to aggregate the social value per tenancy (that is every tenancy) with the £143,948 for each new property, which would be misleading.

An alternative would be to take the LEM effect per new property, and:

- Assume that all earlier building activity was at the same level of LEM generated (by implication the same spend on construction, and the same multiplier for those earlier periods)
- Assume a useful life of those buildings before major overhaul or rebuilding, to give a useful life
- Derive a LEM per tenancy from this but covering the value being "amortised" by this calculation in the current year across the whole portfolio.

This, however, is subject to some very material assumptions, and we have taken the view that these cannot be ascertained to an appropriate level to give certainty of viewpoint with regard to the number or simplicity and clarity of the explanation. We have therefore taken the more easily calculable and explainable version of spreading the total LEM value for the current year over the total tenancies in the portfolio.

[6] Hyde Group's financial statements for 2017/2018, note 4
[7] Hyde Group's financial statements for 2017/2018, note 17
[8] Hyde, 2018 – Consolidated Report and Financial Statements (table 17 – "Housing Properties")
[9] Ⓐ : Number assured by PwC
[10] Hyde, 2018 - Consolidated Report and Financial Statements (housing units note 5)
[11] Hyde, 2018 - Hyde – Consolidated Report and Financial Statements (table 17 – "Housing Properties")

Modelling inputs

Cost units used in the modelling

Figure 10 summarises the cost units we have used as inputs to our modelling and to which we have applied evidence-based prevalence assumptions for each cohort or sub-cohort (as described in the Modelling Mechanic column). All costs are per person, unless otherwise stated:

Area of Impact/ Value	Cost Area	Unit Measured	Unit Value	Modelling Mechanic
Financial wellbeing	Universal Credit (UC)	Reduction in UC paid for those in employment	£0.63 per £1.00 earnt	Applied to employed adults in each profile
	Temporary accommodation	Housing paid for by local authority	£200 per week plus £1,082 one-off cost	Applied to no. of residencies in temporary accommodation profile only
	Problem debt	Cost to creditors of debt recovery	5% of debt	Applied to adults in each profile
Physical health	Falls in the elderly	Health and social care costs (average aggregate cost)	£4,552	Applied to elderly residents in each profile
	GP visits	Cost of GP visit, including a prescription	£81 per visit	Modelled separately for adults, elderly and children in each profile
	Childhood asthma	Annual cost of NHS treatment for asthma	£800	Applied to children in each profile
	Drug usage and abuse	Average cost of structured community drug treatment	£2,604	Applied to adults and elderly in each cohort
	Alcohol dependency	Average treatment cost	£1,800	Applied to adults and elderly in each cohort
	A&E visits	Average cost per visit	£919 in elderly; £611 in others	Modelled separately for adults, elderly and children in each profile
Mental health	Depression, anxiety and stress	Weighted average cost of treatment	£267	Applied across adults, elderly and children in each profile
Education	Not in Employment, Education or Training (NEET)	Lifetime cost of NEET	£106,101 with first year cost of NEET per person at £10,072	Only modelled for children in each profile
Social justice	Police call-outs by elderly	Cost per call-out	£629	Applied to elderly in each profile
	Cost of crime	Average cost of crime	£10,276	Applied to adults in each profile
	Fire service call-outs	Average cost of fire[12]	£44,523	Applied to adults in each profile
Family	Children on Child Protection Register	Cost of child on Register but not in care	£3,252	Applied to children in each profile
	Elderly in residential care	Average annual cost of residential care in care home	£53,560	Applied to elderly in each profile
Employment	Productivity	Gross Value Added (Type 2 multiplier)	£20,281 with 1.6 GVA multiplier	Applied to employed adults in each profile
	Presenteeism	Gross Value Added	£20,281	Applied to employed adults in each profile
	Absenteeism	Gross Value Added per day	£82 per day of absence	Applied to employed adults in each profile

Figure 10 A summary of cost units used as input to modelling

[12] Note that these calculations represent a general review on fire and exclude the effect of additional work that Hyde has carried out post Grenfell.

Modelling inputs

Inflation of unit costs

Where possible we have used unit costs that are current and the most material cost inputs in our model are recent (these being costs associated with temporary housing costs, problem debt, Universal Credit and GVA).

In other areas, and notably with regard to health cost data we have chosen to use the most recent reliable data available, but not to artificially inflate those costs to 2017/18 rates. Our health cost data are largely taken from the well-respected Manchester Unit Cost Database, in which costs generally relate to 2013/14 or 2015/16. Since inflation in health costs is modest, and because a significant component of such costs is wages (which have not moved in line with RPI over recent years) there is no material change expected to those figures. As a result, applying a uniform inflation rate would risk overstating costs, and hence would impact values. This principle will apply across a range of public service areas, and in such cases we have also chosen not to inflate unit costs.

Causality and alternative attribution

Housing is an intervention which has an effect throughout people's lives. Different types of housing can be seen as a factor in exacerbating or reducing and, ultimately, meeting people's needs. For example, those living in temporary accommodation lack the stability and security required to address their often complex needs and so these needs tend to become exacerbated. By contrast, social housing offers this stability, addressing that specific challenge, allowing residents time and space to address other needs, in turn enabling tenants to thrive. However, in all these scenarios - while housing is certainly a factor in enabling people to have a good quality of life, and maybe even a pivotal factor in enabling people to thrive - it is by no means the only dynamic at play. Indeed, there are many other contributing factors, which are often inter-related - all of which will have an effect on tenants' lives.

A calculation for alternative attribution has therefore been included in the model to allow for the complexity of factors involved in people's lives, and as a result of this calculation:

Only 60% of the social impact generated has been attributed to the social tenancy.

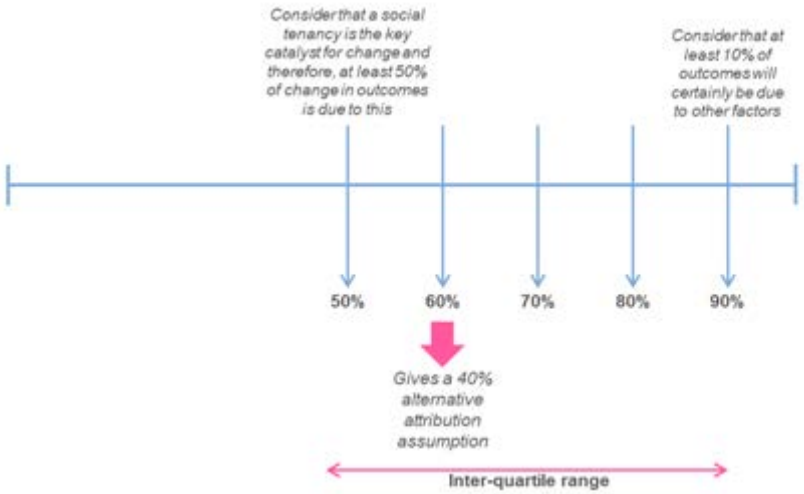


Figure 11 calculating the alternative attribution

Modelling inputs

When choosing how much alternative attribution to apply, we consider who or what else contributes to the change and then judge a range in which it is reasonable to assume that the change in outcomes experienced by people is a consequence of the intervention being modelled (here, social housing). We take a value at the top end of the lower quarter of that range as being a conservative and prudent estimate of attribution (see Figure 11).The underlying assumptions are:

- It is not unreasonable to assume that a social tenancy is a key catalyst for change in people's lives; it is all-pervasive, with a big impact. It is therefore considered that at least 50% of change seen is due to the social tenancy (rather than other factors). At the other end of the range, it is considered that if the social tenancy is the pivotal factor for change, then 90% of the change seen could be due to the social tenancy. Moving "one quarter up" to a point between 50% and 90% gives 60% attributable to the tenancy and 40% attributed to alternative parties and factors.
- The Keep Britain Tidy, Helena Partnerships SROI[13] also model alternative attribution, this report looks at the population as a whole and uses a 30-60% alternative attribution. StepChange[14] has an overlapping cohort with those studied in this model (although this study considered the cost of addressing problem debt; arguably not as far-reaching a change as housing) and used an alternative attribution ranging from 25% - 40% was employed in this model. Nottingham City Homes[15] attributed 55% to a stable home (the alternative attribution was therefore 45%), with a higher alternative attribution on some of the other categories of home. Taken collectively, these comparisons would suggest that 40% is a reasonable assumption for alternative attribution in our model.
- This means that 40% of the social impact is attributed to other factors and parties. Other impact reports such as the Keep Britain Tidy, Helena Partnerships SROI also model alternative attribution, this report looks at the population as a whole and uses a 30-60% alternative attribution. Likewise, StepChange[16] which has a cohort that overlaps with those studied in this report (although considering the cost of problem debt which is arguably not as all-pervasive a change as housing) has an alternative attribution, ranging from 25%-40%. Nottingham City Homes[17] attributed 55% to a stable home (alternative attribution therefore 45%), with a higher alternative attribution on some of the other home categories. This suggests 40% is a reasonable assumption for alternative attribution in our model.
- The 40% alternative attribution has been sensitivity tested to examine the effect on value if alternative attribution is:

  1. Increased to 50%
  2. Decreased to 30%

  The overall total values for the social element (i.e. excluding construction and maintenance) is adjusted downwards by 10% or upwards by 10% in these two instances.

[13] Clifford, Hutchinson and Theobald, 2011
[14] Clifford, Ward, Coram and Ross, 2014
[15] Jones, Valero-Silva and Lucas, 2016
[16] Clifford, Ward, Coram and Ross, 2014
[17] Jones, Valero-Silva and Lucas, 2016

Modelling inputs

Deadweight

The research focused on the availability of a social tenancy, and the improvements in life course for the tenants that accessing it, matching economic figures to those under the selected headings.

Best practice, as defined by the European Commission,[18] requires any such evaluation of outcomes to be adjusted to exclude 'deadweight': the extent to which those outcomes could have arisen without the intervention (in this case the social tenancy). With the tenancy as the key differentiator between the outcomes not in a social tenancy, and the outcomes when in a social tenancy, the deadweight (by definition) must be very low. Variability of that outcome is, of course, included in the averages and percentages used in the calculations of the values themselves. However, it is hard to argue that these could never, under any circumstances, have happened but for the tenancy and we have therefore used a 5% deadweight as illustrative of this position.

Arriving at a value per tenancy

When calculating the value of 'without social housing' and 'with social housing' profiles, much of the cost and avoided costs data is only available per person. For example, evidence is available to suggest how many times an individual goes to the GP but no data is available to suggest what this would look like for a household. The model therefore calculates a value per person and this total value is then divided by the number of Hyde tenancies, to arrive at a value per tenancy.

The number of Hyde units is 35,915, which represents the total number of social and affordable rent, sheltered and supported, and shared ownership units (it does not include Hyde units that are under contract management).[19] Note that we have not calculated the value of the specific benefits associated with shared ownership; rather these have been amalgamated to a general housing cohort.

When modelling and allocating people to the different profiles, we used a static population size of 76,710. This was derived from data in the Hyde annual report for financial year 2017[20]. The number of residents (105,000) was divided by the number of homes under management (49,160) to arrive at the average number of people per Hyde home of 2.13588. This average was then applied to the number of Hyde homes listed above (35,915), to arrive at the total number of people in our cohort: 76,710. These people were then allocated across the 'without social housing profiles' and then again across the 'with social housing profiles'.

[18] Clifford, Hehenberger and Fantini, 2014
[19] Patel, 2018, figures provided by Hyde from 2018 financial statements
[20] Hyde, 2018

Modelling inputs

Sensitivity testing

During the course of our modelling we have used robust data wherever it is available, cross-referencing and validating across multiple sources, wherever possible. Where data has not been found, but there is qualitative evidence, we made assumptions that were then tested with Hyde staff and other independent experts. We have sensitivity tested those assumptions in which we have less confidence, by re-modelling with higher or lower input figures. This will highlight where assumptions might have a material impact on the overall value calculation, if they turn out to be significantly wrong.

The tests we have performed were:

1. Reducing the proportion of people in 'Temporary accommodation' by 10% of the base case (18% in base case) and allocating the difference to 'family and friends' and 'private tenant' proportionately
2. Reducing the proportion of people in 'Stable and good life' by 10% of the base case (47% in base case) and allocating the difference proportionately among the other three profiles with social housing
3. Increasing the proportion of people in 'Crisis' by 10% of the base case (8% in base case) and allocating the difference proportionately among the other three profiles in 'with social housing'
4. Increasing the number of unemployed people in each of the 'with social housing' profiles by 10% (of their current levels of unemployment)
5. Reducing the number of unemployed people in each one of the profiles without social housing by 10% (of their current levels of unemployment)
6. Increasing the level of alternative attribution to 50% to reflect the possibility that more of the change seen in social housing profiles is due to external factors, and not the tenancy itself
7. Reducing the level of alternative attribution to 30% to reflect the possibility that less of the change seen in social housing profiles is due to external factors, and more is due to the tenancy itself
8. Reducing the amount that a local authority pays per week for temporary accommodation to reflect the risk that they may not pay as high an amount as we anticipate
9. The type II GVA multiplier used in the construction and maintenance impact calculations was increased by 0.5 (from 0.88 to 1.38).
10. The type II GVA multiplier used in the loss of productivity for the economy calculation for those who are unemployed was increased by 0.5 (from 0.6 to 1.1)
11. The proportion of elderly residents who would avoid the need for residential care was increased for both temporary accommodation (+2.5% from 0% base case) and family and friends (+1.0% from 2.5% base case).

None of these tests was shown to produce a material impact on our findings.

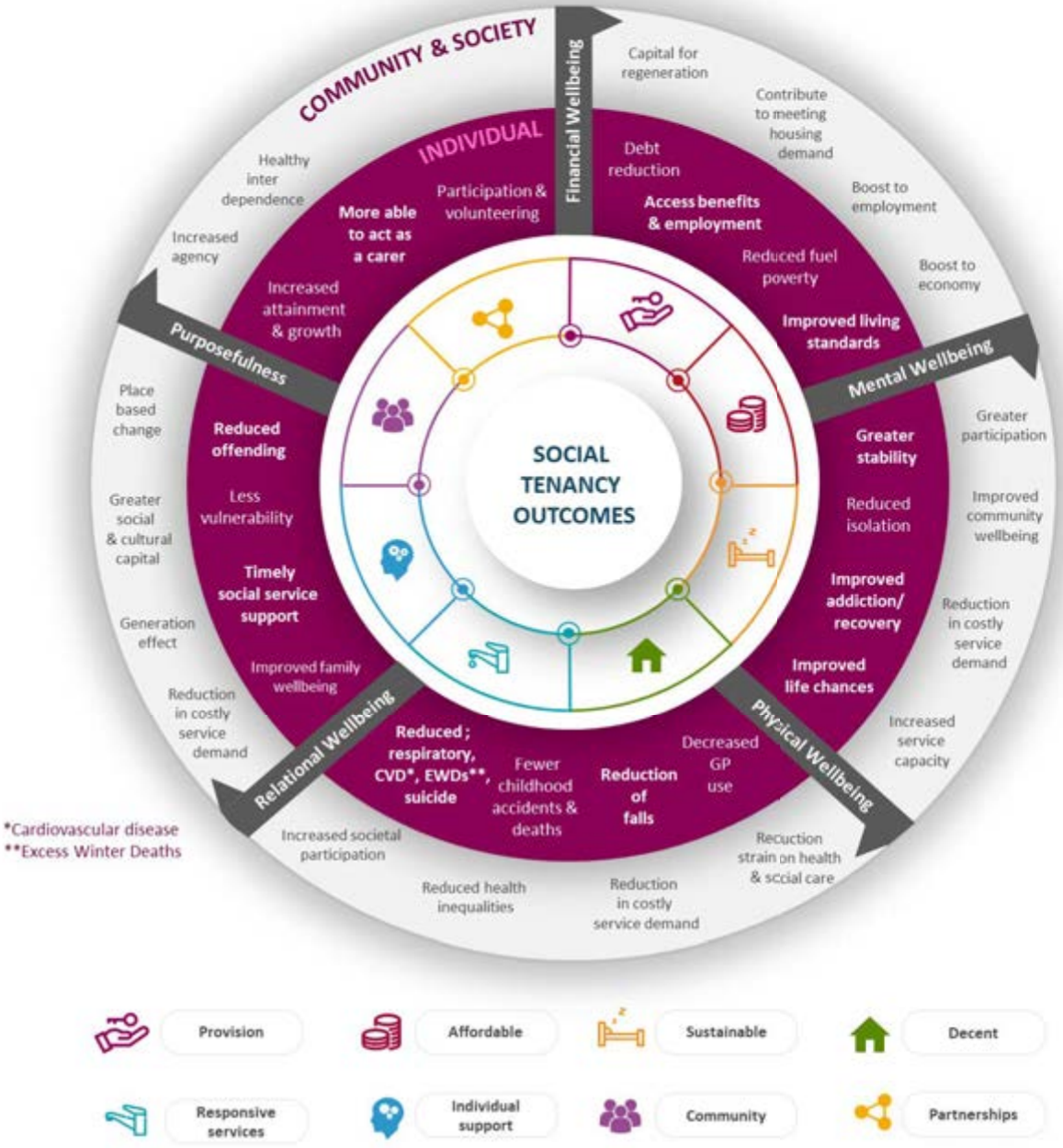
Appendices

A Regulatory standards that registered providers of social housing must meet

Theory of change

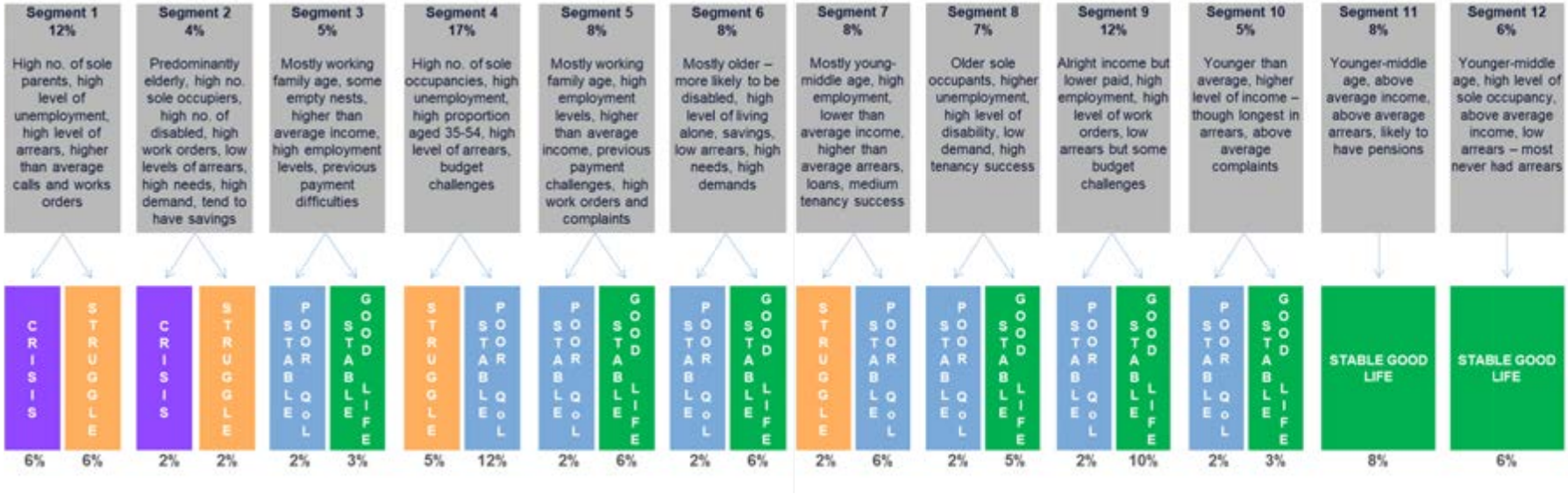
A Regulatory standards that registered providers of social housing must meet

Outcomes of a social tenancy



A Regulatory standards that registered providers of social housing must meet

Segmentation diagram



B Regulatory standards that registered providers of social housing must meet

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